# Earned Value Management Things to Know

- ♦ There are only a few actual formulas on the exam
- There are some questions about the results that you would get from a given formula
- Think about the Big Picture-what does it really mean?
- ♦ Look for key words in the questions if they are asking about variance, the answer option will include subtracting, but there will likely be a couple of options dividing. If asking about ratios or indexes, the answer option will include dividing.

## Main Terms to Know

♦ EV (Earned Value)

As of today, what is the budgeted cost of the work that is actually accomplished?

♦ **PV** (Planned Value)

As of today, what is the budgeted cost of the work that is scheduled to be completed?

♦ AC (Actual Cost)

As of today, what is the actual cost incurred for the work accomplished?

\* **BAC** (Budget at Completion)

How much did we budget for the total project?

### Terms To Know

#### **♦ CV (Cost variance)**

Cost variance analysis measures the actual performance to date (earned value) against what's been spent (actual costs). If negative value, over budget. If 0 or positive value, on or under budget.

#### SV (schedule variance)

Schedule variance analysis compares actual progress/performance to date (earned value) to estimated progress/performance (planned value). If negative value, behind schedule. If 0 or positive value, on or ahead of schedule.

#### CPI (Cost Performance Index)

Measures value of work completed as of measurement date (earned value) against actual costs. Indicates cost efficiency for work completed.

#### **⋄** SPI (Schedule Performance Index)

Measures progress as of measurement date (earned value) against planned progress (planned value)

# Mnemonic: A Great way to Remember

EVM formulas

CEA/SEP

On the right of the = signs, add a V after each, except the A;

add a C (actual costs)

\*\*\*THIS IS A GREAT USE FOR THE DRY ERASE BOARD

DURING THE EXAM!

So,

 $\underline{\mathbf{C}}V = \underline{\mathbf{E}}V - \underline{\mathbf{A}}C$  (earned value – actual costs)

 $\underline{\mathbf{S}}V = \underline{\mathbf{E}}V \cdot \underline{\mathbf{P}}V$  (earned value – planned value)

 $\underline{\mathbf{C}}$ PI= $\underline{\mathbf{E}}$ V/ $\underline{\mathbf{A}}$ C (earned value / actual costs)

 $\underline{\mathbf{S}}PI = \underline{\mathbf{E}}V/\underline{\mathbf{P}}V$  (earned value / planned value)

